### => D HIS

(FILE 'HOME' ENTERED AT 07:33:52 ON 12 MAR 2007)

FILE 'REGISTRY' ENTERED AT 07:33:57 ON 12 MAR 2007

FILE 'CAPLUS' ENTERED AT 07:34:03 ON 12 MAR 2007

E US20060208227/PN

L1 1 S E3

SELECT RN L1 1

FILE 'REGISTRY' ENTERED AT 07:34:30 ON 12 MAR 2007

L2 20 S E1-E20

L3 1021 S C21 H30 N2 O2/MF

L4 1 S L3 AND L2

FILE 'REGISTRY' ENTERED AT 07:42:37 ON 12 MAR 2007

STRUCTURE UPLOADED

.L6 4 S L5

L7 1 S L5 CSS

L8 111 S L5 CSS FUL

L9 STRUCTURE UPLOADED
L10 STRUCTURE UPLOADED

L11 4 SEARCH L10 CSS SUB=L8 FUL

FILE 'CAPLUS' ENTERED AT 07:48:26 ON 12 MAR 2007

L12 2 S L11

=> D L10

L5

L10 HAS NO ANSWERS

L10 STR

G1 Me,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu

Structure attributes must be viewed using STN Express query preparation.

# => D BIB ABS HITSTR 1-2

L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:1247858 CAPLUS

DN 146:28395

TI Aminophenol curing agents for polyurethanes for reaction injection molding

IN Yasuyoshi, Matsunori; Fujioka, Toyozo; Shiraki, Yasushi

PA Idemitsu Kosan Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 18pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006321834	A	20061130	JP 2005-143805	20050517
PRAI JP 2005-143805		20050517		
GT				

The curing agents comprise aminophenols represented by the general formula I [R1-R4 = H, C1-20 alkyl; A = direct bond, O, NH, SO2, CH2, CMe2; the OH and NH2 on one benzene ring exist adjacent to each other; k = 0, 1; m, n = 1, 2]. The curing agents are halogen-free, thereby being non-hazardous, and are capable of changing curing speed as desired. Thus, 150 g bisphenol A in MEK was treated with HNO3 to give 2,2-bis(3-nitro-4-hydroxyphenyl)propane, 200 g of which was reduced with H in DMF to give 2,2-bis(3-amino-4-hydroxyphenyl)propane (II) in yield 73%. A liquid hardener masterbatch containing 20% II in methoxy-N,N'-dimethylpropionamide was mixed with an isocyanate-modified urethane prepolymer (MC 50) at rate NCO/active H = 1.0, cast in a mold, pressed at 150°, and aged at 120° for 1 h to give a sheet showing tensile strength 0.88, 100% modulus 1.101 MPa, elongation 110%, JIS A Durometer hardness 46, and pot life 1 min.

IT 776993-17-0P 776993-18-1P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(aminophenol curing agents for polyurethanes for reaction injection molding)

RN 776993-17-0 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylethyl)amino]- (9CI) (CA INDEX NAME)

RN 776993-18-1 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylpropyl)amino]- (9CI) (CF INDEX NAME)

IT 915956-48-8P 915956-50-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked; aminophenol curing agents for polyurethanes for reaction injection molding)

RN 915956-48-8 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylethyl)amino]-, polymer with MC 50 (polyurethane) (CA INDEX NAME)

CM 1

CRN 915956-15-9 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 776993-17-0 CMF C21 H30 N2 O2

RN 915956-50-2 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylpropyl)amino]-, polymer with MC 50 (polyurethane) (CA INDEX NAME)

CM 1

CRN 915956-15-9 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 776993-18-1 CMF C23 H34 N2 O2

RN

CN

776993-17-0 CAPLUS

INDEX NAME)

```
ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
T.12
     2004:872832 CAPLUS
AN
DN
     141:350875
TI.
     Aromatic hydroxyamine derivatives for antioxidants in plastics, rubbers,
     and petroleum products
IN
     Shiraki, Yasushi
PA
     Idemitsu Petrochemical Co. Ltd., Japan
SO
     PCT Int. Appl., 34 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
     PATENT NO.
                          KIND
                                  DATE
                                              APPLICATION NO.
                                  -----
ΡI
     WO 2004090070
                           A1
                                  20041021
                                              WO 2004-JP4608
                                                                       20040331
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
     EP 1612254
                                  20060104
                                              EP 2004-724787
                           A1
                                                                       20040331
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
                                              US 2005-551451
     US 2006208227
                                  20060921
                           Α1
                                                                       20050929
PRAI JP 2003-99104
                           Α
                                  20030402
     JP 2003-410630
                           Α
                                  20031209
     WO 2004-JP4608
                           W
                                  20040331
OS
     MARPAT 141:350875
     The derivs are represented by (C6HXYR2A)nC6H(OH)(NHR1)R3, wherein R1-R3 = H or alkyl groups, X = H or OH, Y = H or NHR1, A = direct bond, O, NH,
AΒ
     SO2, CH2 or C(CH3)2; and OH and NHR1 are next to each other when
     introduced into a single benzene ring, n = 0 or 1, but R1 \neq H when n
     = 0. Stirring o-aminophenol 12, 2-iodopropane 22.4, and KHCO3 11.4 g in
     60 mL DMF for 5 h gave a 98.4%-pure 2-(isopropylamino)phenol that started
     to absorb O after 370 min in an antioxidn. test.
IT
     776993-17-0P
     RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP
     (Preparation); USES (Uses)
        (aromatic hydroxyamine derivs. for antioxidants in plastics, rubbers, and
        petroleum products)
```

Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylethyl)amino]- (9CI)

IT 776993-18-1

RL: MOA (Modifier or additive use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(aromatic hydroxyamine derivs. for antioxidants in plastics, rubbers, and petroleum products)

RN 776993-18-1 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylpropyl)amino]- (9CI) (CA INDEX NAME)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
> D HIS
```

L5

(FILE 'HOME' ENTERED AT 07:33:52 ON 12 MAR 2007)

FILE 'REGISTRY' ENTERED AT 07:33:57 ON 12 MAR 2007

FILE 'CAPLUS' ENTERED AT 07:34:03 ON 12 MAR 2007

E US20060208227/PN

L1 1 S E3

SELECT RN L1 1

FILE 'REGISTRY' ENTERED AT 07:34:30 ON 12 MAR 2007

L2 20 S E1-E20

L3 1021 S C21 H30 N2 O2/MF

L4 1 S L3 AND L2

FILE 'REGISTRY' ENTERED AT 07:42:37 ON 12 MAR 2007

STRUCTURE UPLOADED

L6 4 S L5

L7 1 S L5 CSS

L8 111 S L5 CSS FUL

L9 STRUCTURE UPLOADED

L10 STRUCTURE UPLOADED

L11 4 SEARCH L10 CSS SUB=L8 FUL

FILE 'CAPLUS' ENTERED AT 07:48:26 ON 12 MAR 2007

L12 2 S L11

FILE 'REGISTRY' ENTERED AT 07:51:55 ON 12 MAR 2007

L13 STRUCTURE UPLOADED

L14 2 S L13 FUL

L15 0 S L13 CSS

L16 STRUCTURE UPLOADED

L17 0 S L16 CSS

L18 SCREEN 1929 OR 2026 OR 2021 OR 2016 OR 2006 OR 1840

L19 STRUCTURE UPLOADED

L20 QUE L19 NOT L18

L21 0 S L20 CSS

L22 4 S L20 CSS FUL

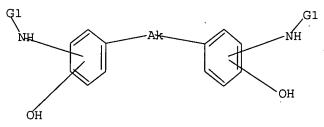
FILE 'CAPLUS' ENTERED AT 07:58:56 ON 12 MAR 2007

L23 2 S L22

=> D L19

L19 HAS NO ANSWERS

L19 STR



G1 n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu

Structure attributes must be viewed using STN Express query preparation.

### => D BIB ABS HITSTR 1-2

L23 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:1247858 CAPLUS

DN 146:28395

TI Aminophenol curing agents for polyurethanes for reaction injection molding

IN Yasuyoshi, Matsunori; Fujioka, Toyozo; Shiraki, Yasushi

PA Idemitsu Kosan Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 18pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
		<b>-</b>			<b></b>		
PI PRAI GI	JP 2006321834 JP 2005-143805	A	20061130 20050517	JP 2005-143805	20050517		

AB The curing agents comprise aminophenols represented by the general formula I [R1-R4 = H, C1-20 alkyl; A = direct bond, O, NH, SO2, CH2, CMe2; the OH and NH2 on one benzene ring exist adjacent to each other; k = 0, 1; m, n =1, 2]. The curing agents are halogen-free, thereby being non-hazardous, and are capable of changing curing speed as desired. Thus, 150 g bisphenol A in MEK was treated with HNO3 to give 2,2-bis(3-nitro-4hydroxyphenyl)propane, 200 g of which was reduced with H in DMF to give 2,2-bis(3-amino-4-hydroxyphenyl)propane (II) in yield 73%. A liquid hardener masterbatch containing 20% II in methoxy-N,N'-dimethylpropionamide was mixed with an isocyanate-modified urethane prepolymer (MC 50) at rate NCO/active H = 1.0, cast in a mold, pressed at 150°, and aged at 120° for 1 h to give a sheet showing tensile strength 0.88, 100% modulus 1.101 MPa, elongation 110%, JIS A Durometer hardness 46, and pot life 1 min.

IT 776993-17-0P 776993-18-1P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(aminophenol curing agents for polyurethanes for reaction injection molding)

RN 776993-17-0 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylethyl)amino]- (9CI) (CA INDEX NAME)

RN 776993-18-1 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylpropyl)amino]- (9CI) (CA INDEX NAME)

IT 915956-48-8P 915956-50-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked; aminophenol curing agents for polyurethanes for reaction injection molding)

RN 915956-48-8 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylethyl)amino]-, polymer with MC 50 (polyurethane) (CA INDEX NAME)

CM 1

CRN 915956-15-9

CMF Unspecified

CCI PMS, MAN

# \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 776993-17-0 CMF C21 H30 N2 O2

RN 915956-50-2 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylpropyl)amino]-, polymer with MC 50 (polyurethane) (CA INDEX NAME)

CM 1

CRN 915956-15-9 CMF Unspecified

CCI PMS, MAN

## \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 776993-18-1 CMF C23 H34 N2 O2

```
L23 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
```

AN 2004:872832 CAPLUS

DN 141:350875

TI Aromatic hydroxyamine derivatives for antioxidants in plastics, rubbers, and petroleum products

IN Shiraki, Yasushi

PA Idemitsu Petrochemical Co. Ltd., Japan

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

FAN.	PATENT NO.				KIND DATE			APPL	ICAT	ION 1	DATE							
ΡI	WO 2004090070			A1 20041021		WO 2004-JP4608					20040331							
		W:						AU,										
								DE,							•	•		•
			GΕ,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	ΚZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
				-		-	-	PL,				-	•	•	•	•	•	•
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,
			BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	ΑT,	ΒE,	BG,	CH,	CY,	CZ,	DE.,	DK,	EE,
								HU,										
			SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,
		,	TD,															
	EP 1612254																	
		R:						ES,										
								RO,									PL,	SK
						A1	A1 200609			ŲS 2005-551451					20050929			
PRAI								20030402										
	JP 2	2003	-410	630		Α	20031209											
	WO 2	2004	-JP4	608		W		2004	0331					•				
OS	MARPAT 141:350875																	
7 D	The devices are represented by (OCIVIIDON) - OCIVION (AVIDANCE )																	

AB The derivs. are represented by (C6HXYR2A)nC6H(OH)(NHR1)R3, wherein R1-R3 =

IT

H or alkyl groups, X = H or OH, Y = H or NHR1, A = direct bond, O, NH, SO2, CH2 or C(CH3)2; and OH and NHR1 are next to each other when introduced into a single benzene ring, n = 0 or 1, but R1  $\neq$  H when n = 0. Stirring o-aminophenol 12, 2-iodopropane 22.4, and KHCO3 11.4 g in 60 mL DMF for 5 h gave a 98.4%-pure 2-(isopropylamino)phenol that started to absorb O after 370 min in an antioxidn. test. 776993-17-0P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(aromatic hydroxyamine derivs. for antioxidants in plastics, rubbers, and petroleum products)

RN 776993-17-0 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylethyl)amino]- (9CI) (CA INDEX NAME)

IT 776993-18-1

RL: MOA (Modifier or additive use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(aromatic hydroxyamine derivs. for antioxidants in plastics, rubbers, and petroleum products)

RN 776993-18-1 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2-[(1-methylpropyl)amino]- (9CI) (CA INDEX NAME)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

### > D HIS

L5 .

(FILE 'HOME' ENTERED AT 07:33:52 ON 12 MAR 2007)

FILE 'REGISTRY' ENTERED AT 07:33:57 ON 12 MAR 2007

FILE 'CAPLUS' ENTERED AT 07:34:03 ON 12 MAR 2007

E US20060208227/PN

L1 1 S E3

SELECT RN L1 1

FILE 'REGISTRY' ENTERED AT 07:34:30 ON 12 MAR 2007

L2 20 S E1-E20

L3 1021 S C21 H30 N2 O2/MF

L4 1 S L3 AND L2

FILE 'REGISTRY' ENTERED AT 07:42:37 ON 12 MAR 2007

STRUCTURE UPLOADED

L6 4 S L5

L7 1 S L5 CSS

L8 111 S L5 CSS FUL

L9 STRUCTURE UPLOADED L10 STRUCTURE UPLOADED

L11 4 SEARCH L10 CSS SUB=L8 FUL

FILE 'CAPLUS' ENTERED AT 07:48:26 ON 12 MAR 2007

L12 2 S L11

FILE 'REGISTRY' ENTERED AT 07:51:55 ON 12 MAR 2007

L13 STRUCTURE UPLOADED

L14 2 S L13 FUL

L15 0 S L13 CSS

L16 STRUCTURE UPLOADED

L17 0 S L16 CSS

L18 SCREEN 1929 OR 2026 OR 2021 OR 2016 OR 2006 OR 1840

L19 STRUCTURE UPLOADED

L20 QUE L19 NOT L18

L21 0 S L20 CSS

L22 4 S L20 CSS FUL

FILE 'CAPLUS' ENTERED AT 07:58:56 ON 12 MAR 2007

L23 2 S L22

FILE 'CAPLUS' ENTERED AT 08:00:19 ON 12 MAR 2007

FILE 'USPATFULL' ENTERED AT 08:00:28 ON 12 MAR 2007

L24 24 S L8

L25 0 S ANTIOXIIDANT

L26 58827 S ANTIOXIDANT

L27 6 S L26 AND L24

# => D BIB ABS HITSTR 14-24 L24

L24 ANSWER 14 OF 24 USPATFULL on STN

AN 2002:17315 USPATFULL

TI Mitochondria protecting agents for treating mitochondria associated

IN Ghosh, Soumitra S., San Diego, CA, UNITED STATES Miller, Scott W., San Marcos, CA, UNITED STATES Davis, Robert E., San Diego, CA, UNITED STATES Moos, Walter H., Oakland, CA, UNITED STATES

PΙ US 2002010195 20020124 Α1 B2 20021224 US 6498191 20001207 (9) ΑI US 2000-733271 A1 RLI Continuation of Ser. No. US 1999-237999, filed on 26 Jan 1999, ABANDONED PRAI US 1998-72484P 19980126 (60) US 1998-72487P 19980126 (60) US 1998-72483P 19980126 (60) US 1998-72482P 19980126 (60) DT Utility FSAPPLICATION SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, LREP

SEATTLE, WA, 98104-7092 CLMN Number of Claims: 35 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1688

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates generally to mitochondria protecting agents for treating diseases in which mitochondrial dysfunction leads to tissue degeneration and, more specifically, to compounds, compositions and methods related to the same. The methods of this invention involve administration of a pharmaceutically effective amount of a mitochondria protecting agent to a warm-blooded animal in need thereof, and composition of this invention contain a mitochondria protecting agent in combination with a pharmaceutically acceptable carrier or diluent. Mitochondrial associated diseases which may be treated by the present invention include (but are not limited to) Alzheimer's Disease, diabetes mellitus, Parkinson's Disease, neuronal and cardiac ischemia, Huntington's disease and stroke.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 1220-78-6P

(preparation of mitochondria protecting agents)

RN 1220-78-6 USPATFULL

CN Phenol, 4,4'-(1-methylethylidene)bis[2-amino- (CA INDEX NAME)

```
L24
    ANSWER 15 OF 24 USPATFULL on STN
AN
       2001:56077 USPATFULL
ТT
       Polymaleimide and polyimide photo-alignment materials for LC display
IN
       Choi, Hwan Jae, Taejeon, Korea, Republic of
       Kim, Joo-Young, Taejeon, Korea, Republic of
       Cheil Industries Inc., Korea, Republic of (non-U.S. corporation)
PA
       Samsung Electronics Co., Ltd., Korea, Republic of (non-U.S. corporation)
PΙ
       US 6218501
                           B1 20010417
       US 1999-353930
                               19990715 (9)
AΙ
PRAI
       KR 1998-28532
                           19980715
DT
       Utility
FS
       Granted
       Primary Examiner: Hampton-Hightower, P.
EXNAM
       Woodcock Washburn Kurtz Mackiewicz & Norris
LREP
```

CLMN Number of Claims: 5 ECL Exemplary Claim: 1

DRWN 2 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 505

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to a cinnamatic photo-polymerization type homopolymeric or copolymeric alignment material, in which polymaleimide is singly used as the main chain, or is combined with styrene, hydroxystyrene or acrylonitrile to form a copolymer so as to be used as the main chain, or polyimide is used as the main chain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 259096-65-6P, 2,2-Bis(3-amino-4-hydroxyphenyl)propane-4-(2,5-dioxotetrahydrofuran-3-yl)-tetralin-1,2-dicarboxylic anhydride copolymer p-(p-fluorobenzoyloxy)cinnamate 259096-66-7P, 2,2-Bis(3-amino-4-hydroxyphenyl)propane-meso-butane-1,2,3,4-tetracarboxylic dianhydride copolymer p-(p-fluorobenzoyloxy)cinnamate (photopolymerizable polymaleimides and polyimides bearing cinnamate groups for optical orientation materials for liquid crystal displays, and their manufacture of the materials by non-rubbing process)

RN 259096-65-6 USPATFULL

CN Naphtho[1,2-c] furan-1,3-dione, 3a,4,5,9b-tetrahydro-5-(tetrahydro-2,5-dioxo-3-furanyl)-, polymer with 4,4'-(1-methylethylidene)bis[2-aminophenol], 3-[4-[(4-fluorobenzoyl)oxy]phenyl]-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 259093-69-1 CMF C16 H11 F O4

$$\stackrel{\text{CH} = \text{CH} - \text{CO}_2\text{H}}{\text{C}}$$

CM 2

CRN 259093-72-6 CMF (C16 H12 O6 . C15 H18 N2 O2)x CCI PMS

CM 3

CRN 13912-65-7 CMF C16 H12 O6

CM 4

CRN 1220-78-6 CMF C15 H18 N2 O2

RN 259096-66-7 USPATFULL

CN Cyclobuta[1,2-c:3,4-c']difurantetrone, tetrahydro-, polymer with 4,4'-(1-methylethylidene)bis[2-aminophenol], 3-[4-[(4-fluorobenzoyl)oxy]phenyl]-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 259093-69-1 CMF C16 H11 F O4

CM 2

CRN 259093-74-8

CMF (C15 H18 N2 O2 . C8 H4 O6)x

CCI PMS

CM 3

CRN 4415-87-6 CMF C8 H4 O6

CM 4

CRN 1220-78-6 CMF C15 H18 N2 O2

HO Me OH

Ме

RN 259093-72-6 USPATFULL
CN Naphtho[1,2-c] furan-1,3-dione, 3a,4,5,9b-tetrahydro-5-(tetrahydro-2,5-dioxo-3-furanyl)-, polymer with 4,4'-(1-methylethylidene)bis[2-aminophenol] (9CI) (CA INDEX NAME)

CRN 13912-65-7 CMF C16 H12 O6

1

CM

CM 2

CRN 1220-78-6 CMF C15 H18 N2 O2

RN 259093-74-8 USPATFULL

CN Cyclobuta[1,2-c:3,4-c']difurantetrone, tetrahydro-, polymer with 4,4'-(1-methylethylidene)bis[2-aminophenol] (9CI) (CA INDEX NAME)

CM 1

CRN 4415-87-6 CMF C8 H4 O6

CM 2

CRN 1220-78-6 CMF C15 H18 N2 O2

L24 ANSWER 16 OF 24 USPATFULL on STN

AN 2001:40570 USPATFULL

TI Polybenzoxazole resin and precursor thereof

IN Saito, Hidenori, Yokohama, Japan
Nakajima, Michio, Kawasaki, Japan

Watanabe, Tsuyoshi, Boston, MA, United States

Tokuhiro, Maki, Kawasaki, Japan

PA Sumitomo Bakelite Company Limited, Tokyo, Japan (non-U.S. corporation)

PI US 6204356 B1 20010320

AI US 1999-404156 19990927 (9)

PRAI JP 1998-275185 19980929

DT Utility FS Granted

EXNAM Primary Examiner: Hampton-Hightower, P.

LREP Smith, Gambrell & Russell, LLP

CLMN Number of Claims: 2 ECL Exemplary Claim: 1 DRWN No Drawings

LN.CNT 303

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Heat resistant polybenzoxazole resins useful as layer insulation films and protective films for semiconductor, layer insulation films for multilayer circuits, cover coats for flexible copper-clad sheets, solder resist films, liquid crystal-aligned films and the like. These resins have excellent thermal, electrical, physical and mechanical characteristics. Polybenzoxazole precursors are provided, represented by the general formula (A), and are used to obtain polybenzoxazole resins, represented by the general formula (D). In the formulas (A) and (D), n denotes an integer from 2-1000, and X denotes a structure having a formula selected from structures indicated at (B). In the formulas at (B), Y denotes a structure having a formula selected from those indicated at (C), and the hydrogen atom(s) on the benzene ring in these

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

structures are optionally substituted.

IT 262352-99-8P

(heat- and water-resistant fluorine-containing polybenzoxazoles with low dielec. constant)

RN 262352-99-8 USPATFULL

CM 1

CRN 86536-25-6 CMF C16 H6 C12 F6 O2

$$C1-C$$

$$CF3$$

$$C-C1$$

$$C - C1$$

CM 2

CRN 1220-78-6 CMF C15 H18 N2 O2

L24 ANSWER 17 OF 24 USPATFULL on STN AN 2000:151196 USPATFULL

TT Aiming and focussing device for fiber-transported laser radiation

IN Johnston, Timothy J., Mountain View, CA, United States Nightingale, John L., Portola Valley, CA, United States

Coherent, Inc., Santa Clara, CA, United States (U.S. corporation) PA

PΙ US 6144787 20001107 US 1998-72483 ΑI 19980504 (9)

DT Utility FS Granted

Primary Examiner: Bovernick, Rodney; Assistant Examiner: Stahl, Michael **EXNAM** 

LREP Limbach & Limbach L.L.P.

CLMN Number of Claims: 26 ECL Exemplary Claim: 1

DRWN 10 Drawing Figure(s); 6 Drawing Page(s)

LN.CNT 578

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Apparatus (20) for aiming and projecting laser radiation emitted from an output-face (56) at an output-end (52) of an optical-fiber transmitter (54), includes a target (26) surrounding the output-end of the optical-fiber transmitter and held in a fixed relationship therewith. One or more light sources (46) illuminate the target with visible light such that the target directs at least a portion of the visible light in the emission direction of the laser radiation whereby when the optical-fiber transmitter is directed toward a surface, the visible light directed by the target indicates an incidence region of the laser radiation on the surface. The apparatus optionally includes an optical system (27) arranged to project a visible image (72) of the target and an image (74) of the output-face of the optical fiber transmitter. The degree of focus of the visible target-image on the surface corresponds to the degree of focus of the laser radiation on the surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 1220-78-6P

(preparation of mitochondria protecting agents)

RN1220-78-6 USPATFULL

CN Phenol, 4,4'-(1-methylethylidene)bis[2-amino- (CA INDEX NAME)

L24 ANSWER 18 OF 24 USPATFULL on STN

AN 2000:18546 USPATFULL

TТ Photosensitive polyimide

IN Chiang, Lin-Chiu, Kitaibaraki, Japan Lin, Jeng-Tain, Kitaibaraki, Japan

PΑ Nippon Mektron, Limited, Tokyo, Japan (non-U.S. corporation)

ΡI US 6025461 20000215

ΑI US 1998-129581 19980805 (9)

PRAI JP 1997-279959 19970926

DTUtility FS Granted

EXNAM Primary Examiner: Hampton-Hightower, P.

LREP Barnes & Thornburg

CLMN Number of Claims: 7 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 247

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A photosensitive polyimide, which comprises a copolymer of (A) three diamine compounds mixture consisting of a diaminopolysiloxane, a hydroxyl group-containing diamine or carboxyl group-containing diamine and 1,4-bis[2-(3-aminobenzoyl)ethenyl]benzene with (B) an aromatic tetrocarboxylic acid dianhydride or a dicarboxylic anhydride having a 2,5-dioxotetrahydrofuryl group as one acid anhydride group, is soluble in all-purpose low boiling organic solvents, typically methyl ethyl ketone and provides a negative type photosensitive polyimide, which is developable with an aqueous alkaline solution.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 221688-71-7P

(photosensitive polyimides from a diamine blend and a tetracarboxylic acid dianhydride for neg.-type photosensitive use)

RN 221688-71-7 USPATFULL

CN 1,3-Isobenzofurandione, 3a,4,5,7a-tetrahydro-7-methyl-5-(tetrahydro-2,5-dioxo-3-furanyl)-, polymer with α-[(3-aminopropyl)dimethylsilyl]ω-[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],
4,4'-(1-methylethylidene)bis[2-aminophenol] and 3,3'-(1,4-phenylene)bis[1-(3-aminophenyl)-2-propen-1-one] (9CI) (CA INDEX NAME)

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

CCI PMS

CM 2

CRN 73003-90-4 CMF C13 H12 O6

CM 3

CRN 70943-30-5

CMF C24 H20 N2 O2

$$CH$$
  $CH$   $CH$   $CH$   $CH$   $CH$   $CH$ 

CM 4

CRN 1220-78-6 CMF C15 H18 N2 O2

L24 ANSWER 19 OF 24 USPATFULL on STN

AN 1999:108933 USPATFULL

TI Dissipator for reducing electrostatic charge in fines generated by a coffee grinder

IN McNeill, Robert C., Georgetown, IN, United States Signorello, Richard J., La Grange, KY, United States

PA Grindmaster Corporation, Louisville, KY, United States (U.S.

corporation)

PI US 5950941 19990914 AI US 1998-72487 19980504 (9)

DT Utility

FS Granted

EXNAM Primary Examiner: Husar, John M.

LREP Wheat, Smith & Beres, PLC, Smith, Vance A., Nagle, Jr., David W.

CLMN Number of Claims: 18 ECL Exemplary Claim: 14

DRWN 23 Drawing Figure(s); 8 Drawing Page(s)

LN.CNT 458

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An apparatus for the preparation of ground material used to make a beverage includes an electrostatic precipitator to prevent the separation of chaff fines from a main stream of the ground material. The apparatus includes a grinder and a chute leading from an exit opening in the grinder to a receptacle for receiving the ground material. The electrostatic dissipator is positioned near the exit opening for minimizing the electrostatic charge on chaff fines created by the grinder, thereby preventing the separation of chaff fines from the main stream of ground material.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 1220-78-6P

(preparation of mitochondria protecting agents)

RN 1220-78-6 USPATFULL

CN Phenol, 4,4'-(1-methylethylidene)bis[2-amino- (CA INDEX NAME)

L24 ANSWER 20 OF 24 USPATFULL on STN

AN 97:120691 USPATFULL

TI Fluorine-containing elastomer composition

IN Yamamoto, Yuichi, Ibaraki, Japan Tatsu, Haruyoshi, Ibaraki, Japan

Alexeevna, Volkova Margarita, Saint Petersburg, Russian Federation Vasilyevich, Sokolov Sergey, Saint Petersburg, Russian Federation Vladimirovich, Veretennikov Nikolai, Saint Petersburg, Russian Federation

PA The Central Synthetic Rubbers Research Institute, Saint Petersburg, Russian Federation (non-U.S. corporation)

Nippon Mektron Limited, Tokyo, Japan (non-U.S. corporation)

PI US 5700879 19971223

AI US 1995-543502 19951016 (8)

PRAI JP 1994-282940 19941021

DT Utility

FS Granted

EXNAM Primary Examiner: Lipman, Bernard

LREP Barnes & Thornburg CLMN Number of Claims: 3 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 236

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A fluorine-containing elastomer composition, which comprises a terpolymer of tetrafluoroethylene, perfluoro(lower alkyl vinyl ether) and cyano group-containing (perfluorovinylether) represented by the following general formula:

CF.sub.2 .dbd.CF[OCF.sub.2 CF(CF.sub.3)]nCN

wherein n is an integer of 1 to 5, and a bis(aminophenyl) compound represented by the following general formula as a cross-linking agent: ##STR1##, wherein A is, for example, an alkylidene group, and X and Y are a hydroxyl group or an amino group, can produce vulcanized products having a good heat resistance and good physical properties, and the bis(aminophenyl) compound has no problem as to its safety.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 178200-07-2P

(fluorine-containing elastomer having cyano crosslinkable groups and vulcanizate with phys. properties and a good compression set)

RN 178200-07-2 USPATFULL

CN Propanenitrile, 2-[[1-[difluoro[(trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]difluoromethyl]-2,3,3,3-tetrafluoro-, polymer with 4,4'-(1-methylethylidene)bis[2-aminophenol], tetrafluoroethene and trifluoro(trifluoromethoxy)ethene (9CI) (CA INDEX NAME)

CM 1

CRN 54682-64-3 CMF C9 F15 N O2

CM 2

CRN 1220-78-6 CMF C15 H18 N2 O2

CM 3

CRN 1187-93-5 CMF C3 F6 O

CM 4

CRN 116-14-3 CMF C2 F4

L24 ANSWER 21 OF 24 USPATFULL on STN

AN 92:40552 USPATFULL

TI Photosensitive polyimide compositions

IN Kwong, Ranee W., Wappingers Falls, NY, United States Sachdev, Harbans S., Wappingers Falls, NY, United States Sachdev, Krishna G., Wappingers Falls, NY, United States

PA IBM Corporation, Armonk, NY, United States (U.S. corporation)

PI US 5114826 19920519 AI US 1989-458130 19891228 (7)

DT Utility FS Granted

EXNAM Primary Examiner: Lovering, Richard D.

LREP Stemwedel, John A.
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN No Drawings

LN.CNT 713

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

New photosensitive polyimide compositions and processes of using the same in the fabrication of electronic components are provided. These compositions are comprised of ##STR1## containing polyamic acids and/or the corresponding hydroxy-polyamic esters, or hydroxypolyimides and a photoactive component as an additive or as covalently bonded functionality on the polymer chain. These compositions provide positive or negative patterning options and may be used as conventional resist materials, as imageable dielectric or passivating layers, as high Tg ion implant masks or as imageable lift-off layers in the fabrication of multilevel metal structures.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 137892-33-2P

(preparation and use of, in photosensitive composition)

RN 137892-33-2 USPATFULL

CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-(1-methylethylidene)bis[2-aminophenol] (9CI) (CA INDEX NAME)

CM 1

CRN 1220-78-6 CMF C15 H18 N2 O2

CM 2

CRN 1107-00-2 CMF C19 H6 F6 O6

L24 ANSWER 22 OF 24 USPATFULL on STN

AN 72:31227 USPATFULL

TI RANDOM BENZIMIDAZOLE-BENZOXAZOLE COPOLYMERS AND METHODS OF PREPARATION

IN Loft, John T., Springfield, NJ, United States

Conciatori, Anthony B., Chatham, NJ, United States

Chenevey, Edward C., North Plainfield, NJ, United States

PA Celanese Corporation, New York, NY, United States

PI US 3671491

19720620

AI US 1969-810813

19690326 (4)

DT Utility

FS Granted

EXNAM Primary Examiner: Short, William H.; Assistant Examiner: Lee, L. L.

LREP Morgan; Thomas J., Barris; C. B., Miller; C. E.

CLMN Number of Claims: 12

DRWN No Drawings

LN.CNT 578

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Random copolymers which consist essentially of from about 90 to about 10 percent of recurring benzimidazole structural units and correspondingly from about 10 to about 90 percent of recurring benzoxazole structural units are provided. Several polymerization methods including, for example, a two stage melt-solid state procedure, are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 36864-44-5P

(manufacture of, by melt-solid state polymerization)

RN 36864-44-5 USPATFULL

CN 1,3-Benzenedicarboxylic acid, diphenyl ester, polymer with [1,1'-biphenyl]-3,3',4,4'-tetramine and 4,4'-(1-methylethylidene)bis[2-aminophenol] (9CI) (CA INDEX NAME)

CM 1

CRN 1220-78-6 CMF C15 H18 N2 O2

CM 2

CRN 744-45-6 CMF C20 H14 O4

CM 3

CRN 91-95-2 CMF C12 H14 N4

L24 ANSWER 23 OF 24 USPATFULL on STN

AN 72:27424 USPATFULL

TI SOLVENT SOLUBLE AROMATIC POLYMIDES AND PRODUCTION THEREOF

IN Suzuki, Munehiko, Yokohama-shi, Japan Hosokawa, Etsuo, Yokohama-shi, Japan Waki, Misao, Kawasaki-shi, Japan

Fukushima, Masatada, Yokohama-shi, Japan

PA Shawa Densen Denran Kabushiki Kaisha a/k/a Showa Electric Wire & Cable

Co., Ltd., Kanagawa-ken, Japan

PI US 3666709 19720530 AI US 1969-885140 19691215 (4)

PRAI JP 1968-91760 19681214

DT Utility FS Granted

EXNAM Primary Examiner: Liebman, Morris; Assistant Examiner: Zahlen, Richard

LREP Holman & Stern

CLMN Number of Claims: 31

DRWN 9 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 807

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An aromatic tetracarboxylic acid which is representable by the general formula

and contains at least 30 mol percent of

and a diamine which is representable by the general formula  $H.sub.2\ N--R'--NH.sub.2$  and contains at least 30 mol percent of diamines representable by any of ##SPC1##

Are heated and caused to react in substantially equal mol quantities in a phenolic solvent or in an aprotic organic polar solvent thereby to produce a new linear aromatic polyimide which is soluble in organic solvents and has high stability for preservation in the form of solutions such as varnishes. This method does not require a step of thoroughly dehydrating the aromatic tetracarbosylic acid component prior to the reaction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 28452-01-9P

(manufacture of, for coatings)

RN 28452-01-9 USPATFULL

CN Phthalic anhydride, 4,4'-carbonyldi-, polymer with benzidine and 3,3'-isopropylidenebis[6-aminophenol] (8CI) (CA INDEX NAME)

CRN 22445-96-1 CMF C15 H18 N2 O2

CM 2

CRN 2421-28-5 CMF C17 H6 O7

CM 3

CRN 92-87-5 CMF C12 H12 N2

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L24
     ANSWER 24 OF 24 USPATFULL on STN
AN
       71:44916 USPATFULL
ΤI
       LOW-TEMPERATURE PROCESS FOR THE PRODUCTION OF POLYAMIDES
IN
       Steinmann, Henry W., Sparta, NJ, United States
       Pollard, Edward T., Middlesex, NJ, United States
PA
       Celanese Corporation, New York, NY, United States
ΡI
       US 3624033
                               19711130
AI ·
       US 1969-840248
                               19690709 (4)
DT
       Utility
FS
       Granted
EXNAM
      Primary Examiner: Short, William H.; Assistant Examiner: Lee, L. L.
LREP
       Morgan; Thomas J., Barris; C. B., Miller; C. E.
CLMN
       Number of Claims: 6
DRWN
       1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 642
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       Polyamides are rapidly produced at relatively low temperatures (e.g.,
       ambient temperatures) by polymerization reaction of diamines with diacyl
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halides. An aqueous solution of a diammonium salt (e.g., a diamine dihydrohalide) and a solution of an equivalent amount of a diacyl halide (e.g., a diacyl chloride) in a water-immiscible solvent (e.g., methylene chloride) are intimately mixed at medium to high shear rate followed by the rapid addition, with continued agitation, of an aqueous solution of an amount of an acid-acceptor e.g., an alkali metal monocarboxylate) sufficient to liberate the diamine and neutralize the byproduct hydrogen halide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 29186-76-3P 29791-93-3P

(preparation of, low temperature, properties of)

RN 29186-76-3 USPATFULL

CN 1,3-Benzenedicarbonyl dichloride, polymer with 4,4'-(1-methylethylidene)bis[2-aminophenol] (9CI) (CA INDEX NAME)

CM 1

CRN 1220-78-6 CMF C15 H18 N2 O2

CM 2

CRN 99-63-8 CMF C8 H4 Cl2 O2

RN 29791-93-3 USPATFULL

CN 1,4-Benzenedicarbonyl dichloride, polymer with 4,4'-(1-methylethylidene)bis[2-aminophenol] (9CI) (CA INDEX NAME)

CM 1

CRN 1220-78-6 CMF C15 H18 N2 O2

CM 2

CRN 100-20-9 CMF C8 H4 Cl2 O2

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